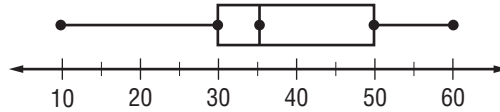


Lesson 3 Reteach

Box Plots

A **box plot** is a diagram that is constructed using the median, quartiles, and extreme values. A box is drawn around the quartile values, and the whiskers extend from each quartile to the extreme values.



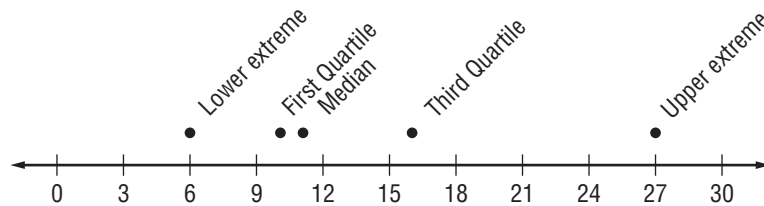
Example 1

The list below shows the number of model airplanes owned by the members of the aviation club. Draw a box plot of the data.

6, 8, 10, 10, 10, 11, 12, 14, 16, 18, 27

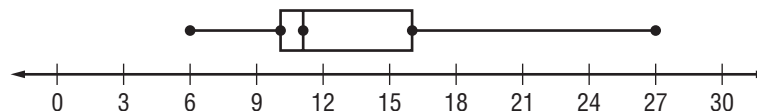
Step 1 Order the numbers from least to greatest. Then draw a number line that covers the range of the data.

Step 2 Find the median, the extremes, and the first and third quartiles. Mark these points above the number line.



Step 3 Draw the box so that it includes the quartile values. Draw a vertical line through the median value. Extend the whiskers from each quartile to the extreme data points.

Numbers of Model Airplanes Owned

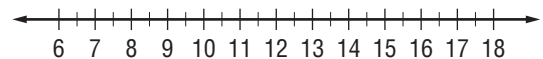
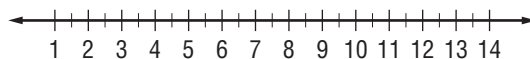


Exercises

Draw a box plot for each set of data.

1. {4, 7, 5, 3, 12, 6, 5}

2. {13, 8, 17, 10, 6, 11, 18}



3. {23, 36, 28, 34, 30, 29, 30, 28, 34}

4. {108, 130, 110, 104, 106, 120, 140, 122, 114, 104}

